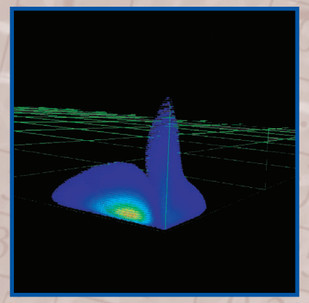

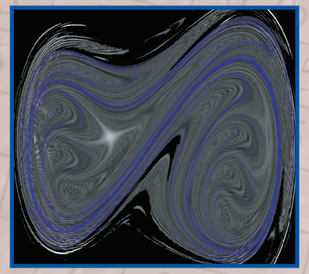

About the Cover

Our cover shows a few images from this collection of brief topical reports on our research in 2004–2005. The images are set above a background taken from a table of potential-energy minima for nuclei for which at least two minima are found. [See the paper "Global Calculation of Nuclear Shape Isomers," by Peter Möller (T-16) on page 120 in this volume.]

The upper figure shows the radial part of the ground state of lithium on a 3D lattice. This ground state represents the starting point for the real time propagation. For more information, see the paper "Time-Dependent Studies of Photoionization of Light Systems: Beyond Two-Electron Systems," by James Colgan (T-4) on page 20 in this volume.

The middle figure shows the classical manifold structure superimposed on the quantum Wigner function. For more information, see the paper "Semiclassics and Topological Aspects of the Quantum-Classical Transition," by Salman Habib (T-8), Benjamin Greenbaum (Columbia University), Kosuke Shizume (University of Tsukuba), and Bala Sundaram (City University of New York) on page 100 in this volume.

The lower figure shows a photograph of the Advanced Industrial Computer, Inc., PC Hot-Swap Chassis (Parallel ATA and Serial ATA) as discussed in the paper "Software Technology to Enable Reliable High-Performance Distributed Disk Arrays," by Michael S. Warren, Chris L. Fryer, M. Patrick Goda, and Ryan Joseph (T-6) on page 70 in this volume.

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NNSA National Nuclear Security Administration